

SECTION II
ALPHA LISTING OF TEST INFORMATION
(Updated 02/2006)

ABO GROUPING

Available only to DHEC clinics

Synonyms: Blood grouping

Test Section: Clinical Labs Section, Hematology/ Immunohematology unit, 803-896-0954

Days Test Performed: Monday-Friday

Request Form: DHEC 1332, Test # 701

Special Instructions: See [Venipuncture procedure Section III, if needed](#)

Specimen & Volume: 5-7ml. EDTA anticoagulated whole blood & 5-7 ml whole clotted blood

Container: One Lavender Top (EDTA) and 1 Red Top Vacuum Tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For universal rejections, see Section I

Methodology: Hem agglutination

Add. Information: Identifies blood as Group A , Group B, Group O, Group AB

CPT Code: 86900

ACANTHAMOEBA CULTURE - See "Amoeba Culture"

ACID FAST BACILLI CULTURE (AFB) - See "Mycobacterial Culture"

ADENOVIRUS CULTURE

Synonyms: Respiratory Virus culture

Test Section: Virology, 803-896-0820/0819

Days Test Performed: Monday-Friday

Request Form: DHEC 1335, Test #270

Special Instructions: Collect specimen while patient is acutely ill and febrile
[See viral culture collection procedure, section III](#)

Specimen & Volume: Throat swab, N-P swab, Eye swab, Rectal swab, walnut sized portion of feces, 5-10 ml Urine, 1 ml. CSF, small piece fresh, unfixed Tissue, or 10 ml. EDTA anti-coagulated whole blood

Container: Screw capped tube of viral transport media for swabs, (provided on request), clean plastic container for feces or urine, Lavender Top (EDTA) vacuum tubes for blood, and Screw cap collection tube for CSF

Storage/Shipping Temperature: Store in refrigerator Ship cold with cold packs. If held longer than 48 hours, freeze at -70 °C and ship on dry ice except for blood. **Blood should not be frozen**

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, section IV](#)

Rejection Criteria, specific: Calcium alginate swab used, specimen not cold on arrival. For universal rejections, see Section I

Methodology: Cell culture; ID by FA

Add. Information: NA

CPT Code: Culture 87252; Identification 87253

AEROBE REFERRED FOR IDENTIFICATION (Bacterial)

Synonyms: Aerobic Culture; Salmonella, Shigella, Campylobacter, Pseudomonas, Streptococcus, etc.; culture for identification

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #511

Special Instructions: NA

Specimen & Volume: Pure bacterial isolate

Container: Screw-capped tube containing agar slant that will support growth of isolate

Storage/Shipping Temperature: Store & ship at Room temperature

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Culture nonviable; culture mixed. For universal rejections, see Section I

Methodology: Conventional bio-chemicals

Add. Information: NA

CPT Code: 87077

AIDS TESTING - See "HIV"

ALCOHOL SCREEN - See "Drugs of Abuse Screen, Urine"

AMOEBAE CULTURE

Synonyms: Acanthamoeba culture, Naegleria culture

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #41100

Special Instructions: Notify Parasitology lab prior to submission. Protect specimen from cold

Specimen & Volume: 1 ml CSF or small piece of tissue (brain, lung, corneal scrapings)

Container: Sterile, screw-capped tube containing small amount of Page's amoeba saline

Storage/Shipping Temperature: Store and ship at Room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen refrigerated or frozen. For universal rejections, see Section I

Methodology: Culture and microscopic examination

Add. Information: Culture for the presence of Acanthamoeba or Naegleria

CPT Code: 87181

AMPHETAMINES SCREEN - See "Drugs of Abuse Screen, Urine"

ANTIBODY SCREEN

This test is only performed as part of the prenatal screen for DHEC clinics

Synonyms: Indirect coombs

Test Section: Clinical laboratories section, immunohematology unit 803-896-0954

Days Test Performed: Monday-Friday

Request Form: DHEC 1332, Test # 702

Special Instructions: Do NOT use serum separator tube; Separate serum from clot. Specimen must be less than 48 hours old when tested [See Venipuncture procedure, Section III, if needed](#)

Specimen & Volume: 5-7 ml blood or 2 ml serum

Container: Sterile RED TOP vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, Specific: Serum separator tube used; specimen too old.

For universal rejections, see Section I

Methodology: Antiglobulin test

Add. Information: Interpretation: Negative- antibody not detected;

Equivocal or positive-Sent to reference lab for confirmation, ID and titer if necessary

CPT Code: 86885

ANTICONVULSANT DRUG MONITORING

This test is only performed for DHEC clinics

Synonyms: Therapeutic drug Monitoring, Antiepileptic drugs

Test Section: Clinical laboratories section, Toxicology unit 803-896-0890

Days Test Performed: Monday-Friday

Request Form: DHEC 1332, Test # 810

Special Instructions: Testing available for 4 drugs: Phenytoin, phenobarbital, Carbamazepine, and Valproic acid. Order test individually

Specimen & Volume: 3 ml serum. [See Venipuncture procedure, Section III](#)

Container: Sterile RED TOP vacuum tube; do not send SST tubes for Phenytoin(Dilantin)

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen. [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For universal rejections, see Section I

Methodology: Enzyme Immunoassay (EIA)

Add. Information: NA

CPT Code: 80185 Phenytoin; 80184 Phenobarb; 80156 Carbamazepine; 80164 Valproic acid

ARBOVIRUS SEROLOGY

Synonyms: Test includes EEE, WEE, SLE, CAL and WNV (West Nile virus)

Test Section: Virology, 803-896-0819

Days Test Performed: Weekly

Request Form: DHEC 1332, Test # 117

Special Instructions: Paired specimens NOT required [See Venipuncture procedure, Section III](#)

Specimen & Volume: 5 ml blood or 2 ml serum

Container: Red top vacuum tube

Arbovirus Serology cont.

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For universal rejections, see Section I

Methodology: IFA for Arboviruses, EIA for West Nile virus

Add. Information: Titer of < 1:16 is considered negative for arboviruses, <1:400 considered negative for WNV

CPT Codes: EEE 86652, WEE 86654, SLE 86653, CEE 86651, WNV 86790

ARBOVIRUS DETECTION BY PCR

Synonyms: Arbovirus PCR. Test includes EEE, WEE, SLE, CAL, LAC, and WNV

Test Section: Molecular Epidemiology 803-896-0825

Days Test Performed: Weekly

Request Form: DHEC 1335, Test #113

Special Instructions: For testing to be initiated the following information **MUST** be provided: Date of onset, date specimen collected, and any pertinent travel history or exposure. Specimen must be collected within 10 days following onset of symptoms

Specimen & Volume: 1 ml CSF minimum

Container: Screw capped CSF collection tube

Storage/Shipping Temperature: Store in refrigerator. Ship on wet ice or with cold packs. If shipping, is delayed > 48 hours, freeze at -20 °C and ship on dry ice.

Shipping Description: Infectious substance [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For universal rejections, see Section I

Methodology: Real time reverse transcriptase polymerase chain reaction (RT-PCR) is used to detect West Nile virus (WNV), Eastern Equine encephalitis (EEE), St. Louis encephalitis (SLE), and La Crosse. California serogroup is tested using standard RT-PCR.

Add. Information: This test is used to detect the presence of Arboviral RNA in clinical CSF specimens. RT-PCR results are positive or negative for the presence of the Arbovirus

CPTCode: 83890 extraction; 83894 gel electrophoresis; 83898 amplification; 83902 reverse transcriptase

BACTERIAL ISOLATE, REFERRED FOR ID - See Aerobe referred.

BARBITURATE SCREEN, URINE - See "Drugs of Abuse Screen"

BENZOYLECGONINE - See "Cocaine Screen"

BETA-HEMOLYTIC STREPTOCOCCUS, GROUP A CULTURE

Synonyms: Beta Strep culture; Throat culture; group A strep or *Streptococcus pyogenes* culture

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #509

Special Instructions: See culture collection procedure, Section III

Specimen & Volume: One (1) Throat swab.

Container: Culturette tube with transport medium

Storage/Shipping Temperature: Store and ship at room temp; ship as quickly as possible

Shipping Description: Diagnostic specimen. See packing & shipping instruction, Section IV

Rejection Criteria, specific: Ampule in transport tube not crushed; specimen in transit more than 2 days. For universal rejections, see Section I

Methodology: Conventional culture methods

Add. Information: NA

CPT Code: 87070

BETA-HEMOLYTIC STREPTOCOCCUS, GROUP B CULTURE

Synonyms: Group B Strep culture, strep vaginal culture, *Streptococcus agalactiae* culture

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #510

Special Instructions: See culture collection procedure, Section III

Specimen & Volume: One (1) Swab

Container: Culturette

Storage/Shipping Temperature: Store and ship at room temp; ship as quickly as possible

Shipping Description: Diagnostic specimen. See packing & shipping instruction, Section IV

Rejection Criteria, specific: Ampule in culturette not broken, swab contaminated with feces, specimen in transit more than 2 days. For universal rejections, see Section I

Methodology: Conventional culture methods

Add. Information: NA

CPT Code: 87070

BLOOD LEAD -See Lead, Blood

BLOOD PARASITE EXAMINATION - See "Malaria Smear"

BORDETELLA PERTUSSIS CULTURE

Synonyms: Pertussis, whooping cough; B. pertussis culture;

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #510

Special Instructions: [See collection procedure for PCR and culture, Section III](#)

Regan-Lowe medium must be warmed to room temperature prior to inoculation.

Immerse swab into medium immediately after collection. Use swab with Dacron or Rayon tip. DO NOT USE cotton or calcium alginate swab.

Specimen & Volume: Nasopharyngeal swab preferred; Throat swab acceptable.

Container: Regan-Lowe transport tube (Available upon request from BOL Media Section)

Storage/Shipping Temperature: Store and ship at room temperature; If shipping is delayed, specimen may be incubated aerobically at 35°C for up to 48 hours prior to shipping

Shipping Description: Diagnostic specimen. [See packing & shipping instruction, Section IV](#)

Rejection Criteria, specific: Regan-Lowe media not used or media expired; Cotton swab used. For universal rejections, see Section I

Methodology: Conventional culture methods

Add. Information: NA

CPT Code: 87070; culture; 87077 ID

BORDETELLA PERTUSSIS DNA BY PCR

Synonyms: Pertussis, Whooping cough

Test Section: Molecular Epidemiology, 803-896-0825

Days Test Performed: Monday-Friday

Request Form: DHEC 1335, Test #115

Special Instructions: Use swab with Dacron or Rayon tip. DO NOT USE cotton or calcium alginate swab.

Specimen & Volume: Two (2) nasopharyngeal swabs (one swab for the right nare and one swab for the left nare. [See collection procedure for PCR and culture, section III.](#)

Container: Sterile 50 ml. polypropylene conical tube or tube provided in collection kit

Storage/Shipping Temperature: Store in refrigerator; Ship cold with cold packs. Specimen must be shipped within 48 hours.

Shipping Description: Diagnostic Specimen. [See packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: Cotton or calcium alginate swab used; Specimen not cold on arrival; specimen too old. For universal rejections, see Section I.

Methodology: Real-time PCR

Add. Information: This test is used to detect the presence of *B. pertussis* nucleic acid (DNA)

CPT Code: 83890 extraction; 83898 amplification

BOTULISM

Prompt diagnosis and early treatment of botulism are essential to minimize the otherwise great risk of death. State Health Departments and the Center for Disease Control & Prevention (CDC) offer 24-hour diagnostic consultation, epidemic investigation assistance, and laboratory services. Trivalent (ABE) Botulinal Antitoxin is available from the CDC. In order to receive these services, it is necessary to do the following:

1. Contact the DHEC/Bureau of Epidemiology, Disease Control & Surveillance consultant at **(803) 898-0861** (M-F during business hours) or digital pager **(803) 690-3756** (after hours).
2. If appropriate, call the CDC Emergency 24 hour number **(770-488-7100)** to make arrangements for immediate shipment of the antitoxin, when indicated, and for proper shipment of selected clinical specimens and/or food samples for testing.
3. Contact the DHEC Division of Diagnostic Microbiology **(803-896-0870 or 0966)** to obtain faxed copy of CDC request form and State Laboratory number.

BREAST SMEAR CYTOLOGY -See PAP smear/ Breast smear Cytology

CAMPYLOBACTER - See "Stool Culture for Enteric Pathogens"

CBC

Synonyms: Complete Blood Count with Differential

Test Section: Clinical Laboratories Section, Hematology Unit – 803-896-0954

Days Test Performed: Monday – Friday

Request Form: DHEC 1332, Test# 760

Special Instructions: Specimen must be less than 24 hours old when tested by laboratory.

Specimen Volume: 3 ml EDTA anticoagulated whole blood (dependent upon whether cells are badly distorted by excess anticoagulant) Mix well by gentle inversion.

Container: Lavender top(EDTA)vacuum tube. [See Venipuncture procedure, Section III, if needed.](#)

Storage/Shipping Temperature: Store and ship at room temperature. **Do not refrigerate.**

Shipping Description: Diagnostic Specimen. [See packing and shipping instructions Section IV.](#)

Rejection Criteria, specific: Specimens more than 24 hours old upon arrival, specimen clotted, and specimen received cold or frozen. For universal rejections, see Section I.

Methodology: Automated Cell Counter

Add. Information: None

CPT Code: 85025

CD4 - See "Lymphocyte Subset"

CELLOPHANE TAPE PREP - See "Pinworm Exam"

CHAGAS DISEASE - See "Parasite Serology"

CHLAMYDIA (CT) DETECTION BY NUCLEIC ACID AMPLIFICATION

Synonyms: Gen-Probe, C. trachomatis Amplified Nucleic Acid Probe, Chlamydia rRNA,CT Aptima

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday-Friday

Request Form: DHEC 1332, Test #506 - Chlamydia; Test #507 - Chlamydia and GC.

Special Instructions: Only use Gen-Probe Aptima Combo 2 specimen collection kit(swab or urine). Patients under the age of twelve should be tested by culture. **Same specimen can be used for both CT and GC** [See collection procedure, Section III](#)

Specimen & Volume: Swab specimen: Endocervical and/or male urethral Gen-Probe blue-shafted swab in Gen-Probe Aptima Combo 2 transport media. Vaginal specimens will be tested, but reported with a disclaimer. An alternate specimen for the vaginal specimen would be a urine specimen. Urine specimen: Patient should not have voided within one hour of collection. Collect 20-30 ml of the first-catch urine stream. Transfer 2 ml. of urine into urine transport tube so that the urine level falls within the two lines on the transport tube labeled: "fill area".

Container: Gen-Probe Aptima Combo 2 Unisex transport kit for swabs.

Gen-Probe Aptima Combo 2 Urine specimen transport tube for urines.

Storage/Shipping Temperature: Store and ship at Room temperature; Swab specimens must be tested within 60 days of collection, and Urine specimens within 30 days of collection.

Shipping Description: Diagnostic specimen. [See packing & shipping instructions, Section IV](#)

CHLAMYDIA DETECTION, cont.

Rejection Criteria, specific: Specimen from non-genital site(other than urine); No swab or white swab in transport media; 2 swabs in transport media; Urine above or below designated black lines on transport tube labeled fill area; Swab specimen more than 60 days old, or urine specimen more than 30 days old when received. For universal rejections, see Section I.

Methodology: Target amplification Nucleic acid Probe

Add. Information: This test is not appropriate in cases of sexual assault or abuse; Patients under the age of twelve should be tested by culture

CPT Code: 87491 for CT only; use 87491 and 87591 (GC) for combination test

CLINICAL CHEMISTRY

Panels available to DHEC clinics only

CHEMISTRY GENERAL PANEL I	CHEMISTRY GENERAL PANEL II	CHEMISTRY GENERAL PANEL III	CPT CODE
CPT CODE: Use individual analyte codes shown in last column			
Glucose	Glucose	Glucose	82947
Uric Acid	Uric Acid	Uric Acid	84550
Cholesterol, total	Cholesterol, total	Cholesterol, total	82465
AST (SGOT)	AST (SGOT)	AST (SGOT)	84450
Total Protein	Total Protein	Total Protein	84155
Albumin	Albumin	Albumin	82040
Globulin*	Globulin*	Globulin*	NA
Total Bilirubin	Total Bilirubin	Total Bilirubin	82247
Calcium	Calcium	Calcium	82310
BUN	BUN	BUN	84520
Creatinine	Creatinine	Creatinine	82565
	BUN/Creatinine Ratio*	BUN/Creatinine Ratio*	NA
	Alkaline Phosphatase	Alkaline Phosphatase	84075
	Phosphorus	Phosphorus	84100
	LDH	LDH	83615
	ALT (SGPT)	ALT (SGPT)	84460
		Sodium	84295
		Potassium	84132
		Chloride	82435
		Triglycerides	84478
		CK	82550
		GGT	82977
LIPID PANEL with GLUCOSE	LIVER PANEL	TB PANEL	CPT CODE:
CPT CODE: 80061, 82947	CPT CODE: 80076 + 82465 (cholesterol)		
Cholesterol, Total	AST (SGOT)	AST (SGOT)	84450
Triglycerides	ALT (SGPT)	ALT (SGPT)	84460
HDL	Alkaline Phosphatase	Total Bilirubin	82247
LDL*	Total Bilirubin	Alkaline Phosphatase	84075
Glucose	Cholesterol	Uric Acid	84550
	Total Protein	BUN	84520
	Albumin	Creatinine	82565
	Globulin*	Glucose	82947
	LDH		

*Calculated Values have no CPT codes and cannot be billed

CLINICAL CHEMISTRY, CONT

Synonyms: Serum Chemistries,

Test Section: Clinical Laboratories, Clinical Chemistry Unit, 803-896-0891

Days Test Performed: Monday-Friday

Request Form: DHEC 1332, Test # 710- 719 (varies with panel)

Special Instructions: Lipid panel requires fasting specimen

Specimen & Volume: 2-5 ml serum [See Venipuncture procedure, Section III, if needed.](#)

Container: Vacutainer tube or SST

Storage/Shipping Temperature: Store and ship at room temperature except during hot weather ship under refrigeration

Shipping Description: Diagnostic specimen. [See packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: none. For universal rejections, see Section I.

Methodology: Automated Chemistry analyzer

Add. Information: None

CPT Code: Must use individual analyte codes. See previous page

CMV - See "Cytomegalovirus Culture"

COCAINE & MARIJUANA SCREEN, URINE

Synonyms: Benzoylcegonine & Cannabinoid, Drugs of Abuse Screen

Test Section: Clinical Laboratories section, toxicology unit, 803-896-0891

Days Test Performed: Monday - Friday

Request Form: DHEC 1332, Test #813

Special Instructions: [See urine drug screen Chain-of-Custody protocol, Section III, if needed](#)

Specimen & Volume: 25 ml Random urine

Container: Plastic urine container

Storage/Shipping Temperature: Store and ship at room temperature; Refrigerate if longer than 24 hours before shipping.

Shipping Description: Considered non-infectious. **DO NOT** put biohazard label on outside of shipping container. [See packaging and shipping instruction under COC collection protocol, section III.](#)

Rejection Criteria, specific: None. For universal rejections, see Section I.

Methodology: Enzyme Immunoassay (EIA)

Add. Information: None

CPT Code: 80101 each drug

COMPLETE BLOOD COUNT- See CBC

CONGENITAL ADRENAL HYPERPLASIA - See "Newborn Screening"

CORYNEBACTERIUM DIPHTHERIAE, CULTURE & ID

Synonyms: *C. diphtheriae*

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday-Friday

Request Form: DHEC 1335, Test #510 (clinical material or swab) or Test #511 (referred isolate)

Special Instructions: NA

Specimen & Volume: Throat swab; referred isolate

Container: Submit swab in transport tube (culturette), submit referred isolate on agar slant in screw capped tube [See bacterial culture collection, Section III](#)

Storage/Shipping Temperature: Store & ship at room temperature

Shipping Description: Diagnostic specimen: [See packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: Culturette not used or Ampule in culturette not crushed (throat swab). For universal rejections, see Section I.

Methodology: Conventional culture methods

Add. Information: Detection of *Corynebacterium diphtheriae*

CPT Code: 87070, culture; 87077 ID

COXSACKIE VIRUS A & B CULTURE - See "Enterovirus Culture"

CRYPTOSPORIDIUM STAIN

Synonyms: NA

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #406

Special Instructions: None

Specimen & Volume: Walnut-sized portion Fresh stool or 3 ml of liquid stool, formalin preserved stool, duodenal fluid, or bile

Container: Transport tube in kit

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen preserved in PVA; improper labeling. For universal rejections, see Section I.

Methodology: Microscopic exam of acid fast stained smear; FA stain

Add. Information: To detect the presence of *Cryptosporidium* oocysts

CPT Code: 87015, 87272

CYCLOSPORA

Synonyms: *C. cayetanensis*

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #410

Special Instructions: None

Specimen & Volume: Walnut-sized portion of fresh stool; or walnut-sized portion of feces in 15 ml of 10 % formalin

Container: Screw-capped tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen preserved in PVA

Methodology: Microscopic exam of acid-fast stained smears

Add. Information: To detect the presence of cyclospora

CPT Code: Concentration 87015, stain 87206

CYSTICERCOSIS - See "Parasite Serology"

CYTOLOGY, BREAST SMEAR.-see PAP smear/Breast smear Cytology

CYTOLOGY, PAPS SMEAR.-see PAP smear/Breast smear Cytology

CYTOMEGALOVIRUS CULTURE

Synonyms: CMV

Test Section: Virology, 803-896-0819

Days Test Performed: Monday-Friday

Request Form: DHEC 1335, Test #273

Special Instructions: Refrigerate immediately upon collection.

Specimen & Volume: Urine (preferred specimen); tissue; Buffy coat (submit 2 EDTA tubes), bronchial washing, CSF

Container: Plastic urine container

Storage/Shipping Temperature: Ship COLD within 24 - 48 hours. DO NOT FREEZE

Shipping Description: Diagnostic specimen. [See packing and shipping instructions, section IV.](#)

Rejection Criteria, specific: Specimen not cold on arrival; specimen frozen; specimen too old. For universal rejections, see Section I.

Methodology: Cell culture

Add. Information: Preliminary report on urine (shell vial culture) reported within 48 hours. No preliminary report on tissue, sputum, feces or CSF

CPT Code: Culture 87252; Identification 87253

DAIRY PRODUCTS EXAMINATIONS

The Dairy Products Section performs test on dairy products to assure the public that the standards for bacterial limits and butterfat levels as defined by the S.C. Milk Standards and Regulations are maintained and that milk is free of antibiotics or added water. Products from each dairy in S.C. are examined at least eight times a year. Tests are performed on pasteurized milk and other dairy products including creams, ice creams and other frozen desserts. Raw milk from dairy farms is tested with the same frequency.

Samples are collected by environmentalists from the DHEC Dairy Division.

If milk or other dairy products are believed to be the cause of a food borne illness, the sample is handled through the county health department, and is tested in the Food Laboratory of the Bureau of Laboratories.

Please call the Environmental Health Section of your local County Health Department for help.

DIPHTHERIA - See *Corynebacterium diphtheriae*

DRUGS OF ABUSE SCREEN, URINE

Synonyms: Panel Includes: Amphetamine, Barbiturate, Cannabinoid, Opiate, Cocaine, Benzodiazepine, Propoxyphene, Methadone, Methaqualone, Phencyclidine and Alcohol

Test Section: Toxicology/Clinical Chemistry, 803-896-0891

Days Test Performed: Monday – Friday

Request Form: DHEC 1332, Test #811

Special Instructions: See chain-of-custody protocol, Section III, if desired

Specimen & Volume: 30 ml. random urine

Container: Plastic urine container

Storage/Shipping Temperature: Store and ship at room temperature; Refrigerate if longer than 24 hours before shipping

Shipping Description: Does not require hazard marking. DO NOT use Biohazard sticker on outside of shipping container. See packing and shipping instructions, Section IV

Rejection Criteria, specific: Break in Chain -of -custody if COC specimen. For universal rejections, see Section I.

Methodology: Enzyme Immunoassay

Add. Information: NA

CPT Code: 80101(X 12 classes). For confirmation of positives, add 80102.

EASTERN EQUINE ENCEPHALITIS - See "Arbovirus Serology"

ECHO - See "Enterovirus Culture"

E. COLI O157 - See "Enteric Pathogens Culture"

ENCHINOCOCCOSIS - See "Parasite Serology"

ENTERIC PATHOGENS CULTURE

Synonyms: Fecal Culture, Enteric Culture, Salmonella Culture, Shigella Culture

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #508

Special Instructions: See [Enteric collection procedure, Section III](#).

Specimen & Volume: Walnut sized portion of Feces or 5-10 ml of liquid stool.
Infant specimens may be collected in a disposable diaper with plastic side facing inside.

Container: Transport tube in Enteric Kit with Cary-Blair medium

Storage/Shipping Temperature: Stools not in medium must be shipped with cold packs to arrive in the laboratory and be inoculated within 24 hours of collection. If specimen is in transport medium, store and ship under refrigeration to be received at the lab within 48 hours of collection.

Shipping Description: Diagnostic Specimen. See [packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: Quantity insufficient; specimen too old; improper transport media or conditions. For universal rejections, see Section I.

Methodology: Conventional culture methods and biochemicals; Serological tests for *Shigella*, *E. coli* 0157:H7, *V.cholera* and *Salmonella* including Salmonella serotyping

Add. Information: NA

CPT Code: 87045 Salmonella and Shigella Culture; 87046 all others; Use 87077 for ID.

ENTEROBIUS VERMICULARIS - See "Pinworm Exam"

ENTEROVIRUS CULTURE

Synonyms: Includes - ECHO, Coxsackie, Polio

Test Section: Virology, 803-896-0819

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #270

Special Instructions: See [Virus culture collection procedures, Section III](#)

Specimen & Volume: Throat swab, rectal swab, N-P swab, feces, CSF

Container: Dry tube for feces, CSF collection tube, or tube of Viral transport media for swab.

Storage/Shipping Temperature: Store in refrigerator and ship cold with cold packs within 24-48 hours. If shipping is delayed, freeze specimen and ship on dry ice.

Shipping Description: Diagnostic Specimen. See [packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen not cold on arrival; specimen too old. For Universal rejections, see Section I.

Methodology: Cell culture

Add. Information: NA

CPT Code: Culture 87252; ID 87253

ENVIRONMENTAL LEAD- See Lead, Environmental

FILARIASIS - See "Parasite Serology"

FOOD-BORNE ILLNESSES (FOOD POISONING)

The Food Laboratory assists in the epidemiological investigation of suspected foodborne illness. A physician with a patient suspected of having a food borne illness should contact Food Protection in the county health department. The laboratory does not accept samples from individuals.

GALACTOSEMIA - See "Newborn Screening"

GC CULTURE - See "Gonococcal Culture"

GEN-PROBE ANTIGEN DETECTION - See GC and Chlamydia antigen detection

GERMAN MEASLES - See "Rubella"

GIARDIA - See "Trichrome Stain" or "Parasite Examination"; General (O and P)

GIEMSA STAIN - See "Malaria Smear"

GONOCOCCAL (GC) DETECTION NUCLEIC ACID AMPLIFICATION

Synonyms: Gen-Probe *N.gonorrhoeae* Amplified Nucleic Acid Probe, Gonorrhea rRNA, GC Aptima

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday-Friday

Request Form: DHEC 1332, Test #505-GC only; Test #507 - GC and Chlamydia

Special Instructions: Only use Gen-Probe Aptima Combo 2 specimen collection kit Materials (swab or urine). Patients under the age of twelve should be tested by culture.

Specimen & Volume: Swab specimen: Endocervical or male urethral Gen-Probe blue-shafted swab in Gen-Probe Aptima Combo 2 Transport media. Vaginal samples will be tested but reported with a disclaimer. An alternate specimen for the vaginal specimen would be a urine specimen. [See GC/Chlamydia Gen-probe collection procedure, Section III](#)

Container: Gen-Probe Aptima Combo 2 Unisex transport kit for swabs.
Gen-Probe Aptima Combo 2 Urine specimen transport tubes for urines.

Storage/Shipping Temperature: Store and ship at room temperature; Swab specimens must be tested within 60 days of collection; Urine specimens within 30 days of collection. **Shipping**

Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen from non-genital site(other than urine); No swab or white swab in tube; 2 swabs in one tube; Urine above or below designated black lines on transport tube labeled fill area; swab specimen more than 60 days old; Urine specimen more than 30 days old.. For universal rejections, see Section I.

Methodology: Target Amplification Nucleic acid Probe

Add. Information: This test is not appropriate in cases of sexual assault or abuse.
Patients under the age of 12 should be tested by culture.

CPT Code: 87591 GC only. Use 87491 and 87591 for combination test

GONOCOCCAL (GONORRHEA) CULTURE

Restricted to County Health Departments only

Synonyms: GC culture, *Neisseria gonorrhoeae* culture

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #501

GONOCOCCAL (GONORRHEA) CULTURE, CONT

Special Instructions: Bring transgrow bottle to room temperature before inoculating: hold bottle upright and roll swab over entire surface of medium; discard swab.

Specimen & Volume: [See *N. gonorrhoeae* collection procedure, Section III](#)

Container: Transgrow bottles. DO NOT PLACE LABEL ON CLEAR SIDE OF BOTTLE

Storage/Shipping Temperature: If an incubator is available, incubate inoculated transgrow bottle upright at 35° C. until shipped, and indicate incubation time on Request Form. Specimens collected on Friday can be incubated until Monday, but remove first thing Monday morning to prevent overgrowth of contaminants. If an incubator is not available, make sure culture is shipped on the same day as collected. Health departments using the state courier may ship cultures on Friday and mark as not incubated. DO NOT REFRIGERATE AFTER INOCULATION. Do not use expired media

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Transgrow media not used or media expired; specimen in transit more than 5 days. For universal rejections, see Section I.

Methodology: Carbohydrate fermentation or enzyme detection

Add. Information: NA

CPT Code: 87070 culture; and 87077 (ID)

GROUP A STREPTOCOCCUS - See Beta-Strep culture, group A

GROUP B STREPTOCOCCUS -See Beta-Strep culture, group B

HANTAVIRUS SEROLOGY- IgG/IgM

Synonyms: None

Test Section: Virology, 803-896-0819

Days Test Performed: As needed

Request Form: DHEC 1332, Test #107

Special Instructions: Call prior to sending specimen; DO NOT remove serum from clot

Specimen & Volume: 5 ml whole blood [See Venipuncture procedure, Section III, if needed](#)

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature.

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For universal rejections, see Section I.

Methodology: EIA

Add. Information: None

CPT Code: 86790

HEAVY METAL ANALYSIS - See Lead analysis...for others, call laboratory

HEMOGLOBIN (Hb) ELECTROPHORESIS

Synonyms: Sick Cell screen Also part of newborn screening panel

Test Section: Newborn Screening, 803-896-0874

Days Test Performed: Monday - Friday

Request Form: DHEC 1327, Test #90005

Special Instructions: [See heel-stick specimen collection procedure, Section III](#)

Specimen & Volume: Blood spots on filter paper or EDTA anticoagulated whole blood, 2 ml

Container: Filter paper or lavender top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic Specimen [See packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: More than one month old; transfused; blood spots not properly collected. For universal rejections, see Section I.

Methodology: Iso Electric Focusing (IEF); High Performance Liquid Chromatography (HPLC)

Add. Information: NA

CPT Code: 83020

HEMATOLOGY- See CBC

HEMOLYTIC ANEMIA - See "Hemoglobin Electrophoresis"

HEPATITIS A SEROLOGY

Synonyms: HAV IgG and HAV IgM

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Upon request; See Special Instructions below.

Request Form: DHEC 1332, Test # 019- IgG Hepatitis A, Total; Test # 020- IgM Hepatitis A, IgM

Special Instructions: HAV total antibody testing will be performed on all patients received for screening, with follow-up on all positive patients with Hepatitis A IgM. If patients suspected of having Hepatitis A and is not involved in an outbreak, request Hepatitis A IgM and total antibody. All Hepatitis A outbreak investigations should be reported to the laboratory supervisor (803-896-0811) or Division Director (803-896-0870) prior to shipment of specimens

Specimen & Volume: 0.5 ml whole blood or 0.25 ml serum or plasma [See Venipuncture collection procedure, Section III, if needed.](#)

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature Specimen must arrive at lab within 5 days of collection; If shipping is delayed more than 5 days after collection, freeze serum at – 20° C and ship on dry ice

Shipping Description: Diagnostic specimen [See packing & shipping instructions, Section IV.](#)

Rejection Criteria, specific: Improperly stored/shipped or contaminated specimens
For universal rejections, see Section I.

Methodology: EIA

Add. Information: A positive HAV IgG antibody result indicates a past or current HAV infection; A positive HAV IgM antibody indicates an acute HAV infection, one that is usually accompanied by clinical symptoms of acute hepatitis; The clinical symptoms of HAV may precede the laboratory detection of HAV IgM by a few days

CPT Code: 86708-IgG; 86709-IgM

HEPATITIS B CORE TOTAL ANTIBODY SCREEN

Synonyms: Anti-HBc

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday - Thursday

Request Form: DHEC 1332, Test # 226

Special Instructions: [See Venipuncture procedure, Section III, if needed](#)

Specimen & Volume: One (1) ml whole clotted blood, or 0.5 ml serum or plasma; Specimen must arrive at lab within 5 days of collection; If shipping is delayed more than 5 days after collection, freeze serum at – 20° C and ship on dry ice

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Improperly stored/shipped specimens, grossly hemolyzed and contaminated specimens

Methodology: EIA

Add. Information: NA

CPT Code: 86704

HEPATITIS B DIAGNOSTIC PROFILE

Synonyms: NA

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday - Thursday

Request Form: DHEC 1332, Test #223

Special Instructions: See [Venipuncture procedure, Section III, if needed](#)

Specimen & Volume: 2-5 ml whole clotted blood, or 2 ml serum or plasma.

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature; Specimen must arrive at lab within 5 days of collection; If shipping is delayed more than 5 days after collection, freeze serum at – 20° C and ship on dry ice

Shipping Description: Diagnostic Specimen See [packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Improperly stored/shipped or contaminated specimens

For universal rejections, see Section I.

Methodology: EIA

Add. Information: Includes tests for HBsAg, anti-HBs, and anti-HBc. HBeAg, anti-HBe and anti-core IgM are performed if indicated.

Interpretations:

HbsAg	anti-HBs	Anti-HBc total antibody	Interpretation
-	-	-	No laboratory evidence of HBV infection. Does not rule-out “low level” HBV carrier state, or the” window” between the disappearance of HBsAg and the appearance of anti-HBs and anti-HBc IgG.
+	-	-	Early acute HBV infection.
+	±	+	HBV infection, either acute or chronic. Differentiate with anti-HBc IgM.
-	+	+	Previous HBV infection and immunity to HBV.
-	+	-	Vaccine-type response indicating immunity to HBV.

CPT Code: 87340 surface antigen; 86706 surface antibody; 86704 core antibody; 87350 E antigen; 86707 E antibody

HEPATITIS B CORE IgM ANTIBODY

Test automatically performed on patients with reactive anti-HBcore total antibody in absence of reactive HBsAg or anti-HBs on Diagnostic Profile (test #223) and test automatically performed on patients with reactive Hepatitis B surface antigen on Diagnostic Test Panel #223

Synonyms: Anti-HBc IgM

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Available upon request. See special instructions below.

Request Form: DHEC 1332, Test #220

Special Instructions: Consultation between the requesting physician or district Medical Director and the laboratory supervisor or Division Director is required prior to specimen testing

HEPATITIS B CORE IgM ANTIBODY, Cont.

Specimen & Volume: 0.5 ml whole clotted blood or 0.25 ml serum or plasma

Container: Red top vacuum tube preferred [See venipuncture procedure, section III, if needed.](#)

Storage/Shipping Temperature: Store and ship at room temperature.

Specimen must arrive at lab within 5 days of collection. If shipping is delayed more than 5 days after collection, freeze serum at – 20° C and ship on dry ice.

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen will not be tested without prior consultation (See Special Instructions above); Improperly stored/shipped or contaminated specimens. For universal rejections, see Section I.

Methodology: EIA

Add. Information: A positive Anti-HBc IgM result in conjunction with a positive hepatitis B surface antigen result indicates an early acute HBV infection

CPT Code: 86705

HEPATITIS B IMMUNE STATUS/POST-IMMUNIZATION

Synonyms: Anti-HBs and Anti-HBc

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday - Thursday

Request Form: DHEC 1332, Test [#222](#)

Special Instructions: Tests includes Anti-HBs and Anti-HBc

Specimen & Volume: 2 ml Whole clotted blood, 1 ml serum or plasma

Container: Red top vacuum tube [See Venipuncture procedure, section III, if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature

Specimen must arrive at lab within 5 days of collection. If shipping is delayed more than 5 days after collection, freeze serum at – 20° C and ship on dry ice

Shipping Description: Diagnostic Specimen [See packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: Improperly stored/shipped or contaminated specimen.
For universal rejections, see Section I.

Methodology: EIA

Add. Information: NA

CPT Code: 86706 surface antibody; 86704 core antibody

HEPATITIS B SURFACE ANTIGEN

Synonyms: HBsAG

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday – Thursday

Request Form: DHEC 1332, Test [#225](#)

HEPATITIS B SURFACE ANTIGEN, Cont.

Special Instructions: NA

Specimen & Volume: 2 ml whole clotted blood, or 1 ml serum or plasma

Container: Red top vacuum tube [See Venipuncture procedure, section III, if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature; Specimen must arrive at lab within 5 days of collection; If shipping is delayed more than 5 days after collection, freeze serum at – 20° C and ship on dry ice

Shipping Description: Diagnostic Specimen. [See packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: Improperly stored/shipped or contaminated specimens

Methodology: EIA

Add. Information: NA

CPT Code: 87340

HEPATITIS PRENATAL SCREEN - See "Hepatitis B Surface Antigen."

HEPATITIS C, TOTAL ANTIBODY

Synonyms: HCV IgG, HCV total antibody.

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday-Friday.

Request Form: DHEC 1332, Test # 224

Special Instructions: For sites requesting HCV RNA if total antibody reactive by EIA, collect blood in a serum separator tube, spin down within 4 hours of collection, and ship cold with cold packs to arrive within 24 hours of collection. Label outside of box HCV Viral Load with indelible marker or sticker that cannot easily be removed.

Specimen & Volume : 0.5 ml whole clotted blood, or 0.250 ml serum or plasma.

Container: Serum separator tube preferred [See blood collection procedure for HCV, Section III](#)

Storage/Shipping Temperature: Store and ship at room temperature unless HCV RNA requested. Specimen must arrive at lab within 5 days of collection. If shipping is delayed, freeze serum at – 20° C and ship on dry ice. See Special Instructions for collection and shipping of HCV RNA samples above. Sample must be shipped according to “Special Instructions”.

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen > 5 days old when received (special request specimens); specimen not cold on arrival (project sites); specimen >24 hrs. old when received (project sites); serum separator not used (project sites). For universal rejections, see Section I.

Methodology: NA

Add. Information: Interpretation: A positive HCV total antibody result indicates a past or current HCV infection; all positive HCV results are repeated in duplicate and the results held until the HCV RIBA confirmation assay is performed; The HCV RIBA is performed once a week, usually on Monday

CPT Code: 86803

HEPATITIS C. QUALITATION, RIBA (STRIP IMMUNOBLOT ASAY)

Synonyms: HCV RIBA

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Once a week, usually on Monday

Request form: DHEC 1332, Test # 224

Special Instructions: Serum Separator tube preferred

Specimen & Volume: One (1) ml Serum or plasma [See collection procedure for HCV Section III](#)

Container: Serum separator tube

Storage/Shipping Temperature: Store in refrigerator; Ship cold with cold packs; Specimen must arrive at lab within 24 hours of collection

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Not received within 24 hours or not cold on arrival. For universal rejections, see Section I.

Methodology: Strip Immunoblot Asssay

Add. Information: Interpretation: A positive test result indicates the presence of anti-HCV and past or present HCV infection. An indeterminate test result indicates that anti-HCV may or may not be present and the patient should be retested in 6-12 months. A negative result that was positive by a licensed EIA screening procedure does not exclude the possibility of infection with HCV. Levels of anti-HCV may be undetectable in early infection. The patient should be retested in 6-12 months if he/she is at high risk for hepatitis infection

CPT Code: 86804

HEPATITIS C QUANTITATION BY PCR (RNA)

Synonyms: HCV Viral Load test

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Within 10 working days of collection

Request form: DHEC 1332, Test # 227

Special Instructions: Specimen must be centrifuged within 4 hours of collection

Specimen & Volume: 2 ml. Serum Use serum separator tube, and collect a full 6 ml. of blood.
[See blood collection procedure for HCV, section III](#)

Container: Serum separator tube

Storage/Shipping Temperature: Transport on cold packs in a container with return mailing address and the word **HCV** printed on the outside of the container; Use enough cold packs to maintain a temperature between 2°-8 °C during transport; Specimen must arrive at the laboratory **within 24 hours of collection**

Shipping Description: Infectious substance. [See packing & shipping instructions, Section IV](#)

Rejection Criteria, specific: Serum separator tube not used, not cold on arrival. For universal rejections, see Section I.

Methodology: Branched DNA (bDNA) Signal amplification nucleic acid probe assay

Add. Information: Used for therapeutic monitoring of HCV infection

Interpretation: The measurable range for the procedure is 3200 -40,000,000 copies/ml or (615-8,320,000 IU/ML). Specimens within this testing range will be reported as HCV RNA copies/ml = _____, or _____ IU/ML

HEPATITIS C QUANTITATION BY PCR (RNA), CONT

Specimens less than 3200 copies/ml (615 IU/ML) will be reported as NO HCV RNA detected, less than 3200 copies/ml (less than 615 IU/ML) Specimens above this range will be reported as HCV RNA is greater than 40,000,000 copies/ml (greater than 8,320,000 IU/ML)

CPT Code: 87522

HERPES SIMPLEX CULTURE

Synonyms: Herpes Virus Culture

Test Section: Virology, 803-896-0819

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #250

Special Instructions: DO NOT freeze specimen at -20 °C. [See viral culture collection for H. simplex, Section III](#)

Specimen & Volume: Throat swab, NP swab, Cervical/vaginal swabs, Surface lesions or Tissue; (small piece of fresh, unfixed) , CSF

Container: Viral transport media.(available upon request)

Storage/Shipping Temperature: Store in refrigerator; Ship cold with cold packs

Shipping Description: Diagnostic Specimen [See Packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Calcium alginate swab used; specimen not cold on arrival. For universal rejections, see Section I.

Methodology: Cell Culture

Add. Information: NA

CPT Code: 87252 Culture; 87253 ID

HIV-1 ANTIBODY DETECTION USING ORAL FLUID SAMPLES

Synonyms: Orasure HIV-1

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Batched per volume of samples received, tested at least twice per week.

Request Form: DHEC 1332, Test #230 HIV-1 (EIA Only)

Special Instructions: Mark Test #15 oral under specimen type

Specimen and Volume: Oral fluid sample collected per instructions found in the Shipping and Collection Section of the Bureau of Laboratories Services Guide. Use the Orasure HIV-1 Oral Specimen Collection Device only. Contact Gwen Pierce at 803-898-0739 for ordering instructions.

Container: HIV-1 Oral Specimen Collection Device

Storage/Shipping Temperature: Store unused Orasure HIV-1 Oral Collection Devices at room temperature(18°C - 25°C, 64°F - 77°F).Exposure to higher temperatures should be avoided. Protect from direct sunlight. Once specimen has been collected, do not expose to temperatures exceeding 37°C (98°F) or direct sunlight. Collected specimens can be stored at 4°C to 37°C (39°F to 98°F) for a maximum of 21 days, including days required for testing. Ship as soon as possible after collection.

Shipping Description: Diagnostic Specimen (See packing and shipping instructions, Section IV)

Rejection Criteria, specific: Specimen volume not met, clear sample (liquid should be blue on pad), and universal rejections, see Section I.

Methodology: Enzyme Immunoassay (EIA), Western Blot on reactive HIV-1 EIA only.

HIV-1 ANTIBODY DETECTION USING ORAL FLUID SAMPLES (CON'T)

Additional Information: Interpretation: Repeat reactive specimens are confirmed by Western Blot; recommend repeat testing on all first-time positive patients by serum (if possible) to include CD4 and Viral Load (HIV-1 RNA).

CPT Code: 86701 for EIA, 86689 for Western Blot

HIV-1 PCR QUALITATIVE (DNA)

Synonyms: HIV-1 Proviral DNA Detection

Test Section: Molecular Epidemiology, 803-896-0825

Days Test Performed: Weekly

Request Form: DHEC 1332, Test # 112

Special Instructions: NA

Specimen & Volume: Infants < 18 months old: Collect whole blood in an EDTA pediatric tube or a heel stick microtainer with EDTA anticoagulant (BD Brand # 365974)

A minimum specimen volume of 0.3 ml is required for testing

Infants ≥ 18 months old and adults: Collect 1.5-2.0 ml EDTA anticoagulated whole blood, (lavender/purple top vacuum tube) [See collection procedure, Section III](#)

Container: EDTA tube or Heel-stick microtainer with EDTA anticoagulant

Storage/ Shipping Temperature: Store and ship at room temperature; Ship using cold packs during hot summer months; **Do not freeze** the specimen; Specimen must arrive at laboratory with 3 days of collection

Shipping Description: Diagnostic specimen. [See packing and shipping instructions, section IV.](#)

Rejection Criteria, specific: clotted blood; specimen > than 3 days old when received, specimen frozen on arrival. For universal rejections, see Section I.

Methodology: PCR with EIA detection.

Add. Information: If Patient is an infant whose mother is anti-HIV-1 positive, or if Patient is an adult whose anti-HIV-1 tests, i.e., EIA and/or Western Blot, have shown indeterminate or conflicting results; Results are reported either Positive or Negative

CPT Code: 87535

HIV-1 PCR QUANTITATIVE (RNA)

Synonyms: HIV-1 Viral Load test.

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Weekly

Request Form: DHEC 1332, Test # 231

Special Instructions: Label outside of container as HIV(VIRAL LOAD). Make sure label will not come off

Specimen & Volume: 1.5 to 2.0 ml EDTA anticoagulated plasma [See Venipuncture procedure, section III, if needed](#) If using EDTA vacutainer, separate the plasma from the packed cells within 2 hours of collection by centrifugation for 20 minutes at room temperature; Remove the plasma from the cells using a sterile transfer pipette to a sterile polypropylene transport tube; **Note:** Remove as much of the plasma from the cells as possible without aspirating cells **The assay requires 1.0 ml of plasma.** The PPT separator tube can be shipped after centrifugation without transferring plasma to another tube. Invert tube after centrifugation to insure complete separation of cells from plasma. If cells present in plasma, re-centrifuge before shipping.

HIV-1 PCR QUANTITATIVE (RNA) con't

Container: PPT vacutainer (supplied by the Bureau of Laboratories call 803-896-0913 to order) or polypropylene tube to which plasma cells have been transferred from the Lavender top (EDTA) vacuum tube

Storage/Shipping Temperature: Store in refrigerator; Ship cold with cold packs; Specimen must arrive at the Laboratory within 24 hours after collection

Shipping Description: Infectious substance. [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen not cold on arrival; whole clotted blood. For universal rejections, see Section I.

Methodology: Branched DNA (bDNA) Nucleic Acid Hybridization with PCR amplification

Add. Information: Therapeutic monitoring of HIV infection

Interpretation: The measurable reportable range for this procedure is 75-500,000 copies/ml plasma; Specimens testing within this range will be reported as the measured number and (in parentheses) as the log 10 value of the measured copy number e.g. 30,000 copies (4.48log 10) *the log 10 value will be rounded to the nearest second decimal place. A 0.5 log 10 increase or decrease in the copy number when compared to the patient's previous viral load result is regarded as a significant change* Specimens testing above 500,000 will be reported as > 500,000 copies/ ml plasma. Specimens testing below 75 copies/ ml plasma will be reported as "No HIV-1 RNA detected less than 75 copies/ ml plasma"

CPT Code: 87536

HIV-1 SEROLOGY

Synonyms: HIV-1 antibody, Anti-HIV-1

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday - Friday

Request Form: DHEC 1332, Test #230 HIV-1(EIAonly), Test #234 HIV-1 (EIA)and Western Blot , Test # 235 HIV-1 (EIA) and STS(Reagin)

Special Instructions: NA

Specimen & Volume: 1 ml serum or plasma.

Container: Red top vacuum tube [See venipuncture procedure if needed.](#)

Storage/Shipping Temperature: Store and ship at room temperature; Specimen must arrive at laboratory within 5 days of collection; If shipping is delayed more than 5 days, freeze serum at -20° C and ship on dry ice

Shipping Description: Diagnostic Specimen [See Packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For universal rejections, see Section I.

Methodology: Enzyme Immunoassay (EIA), Western Blot, and STS Reagin for Syphilis

Add. Information: Interpretation: Repeat reactive specimens are confirmed by Western Blot; Recommend repeat testing on all first-time positive patient results including CD4 and Viral load (HIV-1 RNA)

CPT Code: 86701 for EIA; 86689 for Western Blot, and 86592 for RPR

HIV-1 SEROLOGY using Dried Blood Spots

Synonyms: NA

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday –Thursday

Request Form: DHEC 1332, Test # 230 or DHEC 1339

Special Instructions: Write Dried blood spot on form in space above specimen type

Specimen & Volume: Dried Blood spots. Fill all paper circles with blood. Ship within 24 hours after collection [See capillary blood collection by finger stick procedure, Section III](#)

Container: Filter paper attached to requisition form

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Insufficient spots filled, scratched and abraded spots, layered or supersaturated spots. For universal rejections, see Section I.

Methodology: Enzyme Immunoassay (EIA), Western Blot

Add. Information: Repeat reactive specimens are confirmed by Western Blot; Recommend repeat testing on all first-time positive results

CPT Code: 86701 for EIA; 86689 for Western Blot

HIV-1 SEROLOGICAL MONITORING- See “Lymphocyte Subset”

HOOKWORM - See “Parasite Examination”

HYPOTHYROIDISM - See "Thyroid Panel" for non-neonatal; see "Newborn Screening" for neonatal

INFLUENZA VIRUS CULTURE

Synonyms: Also included in respiratory culture battery

Test Section: Virology, 803-896-0819

Days Test Performed: Monday- Friday

Request Form: DHEC 1335, Test [#271](#)

Special Instructions: *Collection of a throat washing has been discontinued because of the use of antibiotics in some collection media. Collect swab (do not use alginate swab) and place in transport media; and refrigerate until shipped. Do not allow patient to gargle media*

Specimen & Volume: Throat or nasopharyngeal swab [See collection procedure for enterovirus or respiratory virus, Section III](#)

Container: Screw capped tube of viral transport media (Available upon request); Keep media refrigerated until used

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Calcium alginate swab used. For universal rejections, see Section I.

Methodology: Cell culture

Add. Information: Submit on patients with symptoms compatible with influenza;
Also see surveillance information below

CPT Code: Tissue Culture, 87252; Identification 87253

INFLUENZA VIRUS A AND B SEROLOGY

Synonyms: NA

Test Section: Virology, 803-896-0819

Days Test Performed: Once/week

Request Form: DHEC 1332, Test [#101](#)

Special Instructions: Acute and convalescent specimens required, 2 weeks between specimens
[See venipuncture procedure, Section III, if needed](#)

Specimen & Volume: 5 ml Whole clotted blood or 2 ml serum

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: none. For universal rejections, see Section I.

Methodology: Hemagglutination Inhibition (HI)

Add. Information: NA

CPT Code: 86710 each titer

INFLUENZA SURVEILLANCE

From October to April of each year, the Bureau of Laboratories participates in the World Health Organization's (WHO) Influenza Surveillance Program. Collection kits are provided and there is no charge if submitting throat swabs for the surveillance. Contact the Virology Lab for more information at 803-896-0819.

LEAD ANALYSIS, BLOOD

Synonyms: NA

Test Section: Advanced Analyses, 803-896-0886

Days Test Performed: Monday, Wednesday, Friday

Request Form: DHEC 1332, Test #852

Special Instructions: NA

Specimen & Volume: 200 µl EDTA whole blood from finger stick or heel stick for screening; Venipuncture preferred for confirmation of an elevated level; Minimum acceptable volume is 3 ml for venipuncture; 200 µL for finger stick or heel stick [See blood lead collection procedures, Section III](#)

Container: Lavender vacuum tube, or lavender Microtainer for finger or heel stick.

Storage/Shipping Temperature: Store and ship at room temperature; Refrigerate specimen if shipping is delayed.

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Clotted blood, insufficient quantity. [See universal rejections Section I.](#)

Methodology: Graphite Furnace Atomic Absorption Spectrometry

Add. Information: <10 µg/dL considered negative for children. Action levels for children and adults printed on results report. Screening levels >10µg/dL require venipuncture confirmation

CPT Code: 83655

LEAD ANALYSIS, ENVIRONMENTAL SAMPLES

Synonyms: NA

Test Section: Advanced Analyses, 803-896-0886

Days Test Performed: Monday- Thursday

Request Form: DHEC 1332, Test #854

Special Instructions: NA

Specimen & Volume: 1 Tablespoon Paint chips, 2 Tablespoons soil, or 100 ml water

Container: Zip-lock bag for paint and soil. Plastic container for water

Storage & Shipping Temperature: Store and ship at room temperature

Shipping Description: Environmental sample. Does not require special packaging

Rejection Criteria, specific: NA

Methodology: Flame Atomic Absorption Spectrometry

Add. Information: Contact DHEC Env. Health 896-0655 for interpretation of results

CPT Code: NA

LEGIONELLA CULTURE

Synonyms: Legionnaire's disease; Legionella culture

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday – Friday

Request Form: DHEC 1335, Test #510

Special Instructions: Note: urine antigen test is not available at the Bureau of Laboratories

LEGIONELLA CULTURE, CONT

Specimen & Volume: 1-2 ml Sputum, Bronchial washing, pleural fluid, or other body fluids, lung tissue, bacterial isolate

Container: Sterile leak-proof container

Storage/Shipping Temperature: Store in refrigerator; Ship cold with cold packs; Specimen must arrive at laboratory within 48 hours of collection; If shipping is delayed for more than 48 hours, freeze at -20 C and ship on dry ice

Shipping Description: Diagnostic Specimen; Isolate is considered Infectious substance [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen not cold on arrival; for universal rejections, see Section I.

Methodology: Conventional culture and biochemical methods

Add. Information: NA

CPT Code: Culture – 87070, culture; 87077 ID

LEGIONELLA FA

Synonyms : NA

Test Section : Bacteriology/Parasitology, 803-896-0805

Days Test Performed : Monday-Friday

Request Form: DHEC 1335, Test [#513](#)

Special Instructions: FA test is screening only; culture is recommended; test [#510](#) will be performed on all specimens for FA that are appropriate for culture.

Specimen & Volume: Fresh lung tissue imprints; scrapings of formalin fixed tissue or lower respiratory tract fluids/sputum; TTA; bronchial washings; pleural fluid; smears on slides(submit at least 2 separate slides), or culture isolate.

Container: Sterile, leak-proof container; crush-proof slide holder; or screw-cap tube containing agar medium that will support growth of isolate.

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic Specimen; [see packing and shipping instructions Section IV.](#)

Rejection Criteria, specific: None. For universal rejections, see Section I.

Methodology: FA Stain

Add. Information: NA

CPT Code: 87206

LEGIONELLA SEROLOGY

Synonyms : NA

Test Section : Virology, 803-896-0819

Days Test Performed: Weekly

Request Form: DHEC 1332, Test [#023](#)

Special Instructions: Paired specimen required and should be taken 3-4 weeks apart

Specimen & Volume: 5 ml whole clotted blood or 2 ml serum [See venipuncture procedure, Section III, if needed](#)

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

LEGIONELLA SEROLOGY, cont.

Rejection Criteria, specific: Only one specimen received. For universal rejections, see Section I.

Methodology: IFA

Add. Information: Interpretation: titer <1:128 is considered negative; a four-fold rise in titer (at least 1:512) from acute to convalescent is considered positive.

CPT Code: 86713

LEISHMANIASIS - See "Parasite Serology"

LEPTOSPIROSIS CULTURE

Synonyms: NA

Test Section: CDC Leptospira Lab 404-639-3905

Days Test Performed: Referred to CDC

Request Form: CDC Form

Special Instructions: Blood specimens should be collected during the first week of symptoms. After the first week of symptoms, collect a mid-stream, clean catch urine specimen; Five (5) tubes of PLM media should be requested from CDC prior to sample collection

Specimen & Volume: 1 ml of heparinized blood or clean catch urine; Collect urine in clean container; Inoculate immediately; Put two (2) drops of blood or urine in each tube of medium; Avoid agitation of the blood sample because free hemoglobin kills Leptospira

Container: Screw capped tubes of PLM media

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Blood specimen collected after first week of illness; specimen not inoculated into PLM media prior to transport. For universal rejections, see Section I.

Methodology: Conventional culture

Add. Information: Serology test is more sensitive and has a shorter turnaround time

CPT Code: 87040 (blood culture); 87088 (urine culture), 87077, ID.

LYME DISEASE

Synonyms: Borrelia Antibodies

Test Section: Virology, 803-896-0819

Days Test Performed: Weekly

Request Form: DHEC 1332, Test # 024

Special Instructions: NA

Specimen & Volume: 5 ml whole blood or 2 ml; Serum

Container: Red-top vacutainer [See Venipuncture procedure, Section III, if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For universal rejections, see Section I.

Methodology: EIA

Add. Information: All positive EIA results are confirmed by western blot

CPT Code: 86618

LYMPHOCYTE SUBSET

Synonyms: CD4; T4 lymphocytes

Test Section: Clinical Labs section, Hematology Unit , 803-896-0954

Days Test Performed: Monday - Friday

Request Form: DHEC 1332, Test #780

Special Instructions: Specimen must be less than 24 hours old when tested by laboratory

Specimen & Volume: 5-7 ml EDTA anticoagulated whole blood Mix well but gently

Container: Lavender top (EDTA) vacuum tube [See Venipuncture procedure, Section III, if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature. **Do not refrigerate.**

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen more than 24 hours old upon arrival, specimen clotted, Specimen received cold or frozen. For universal rejections, see Section I.

Methodology: Laser Flow cytometry

Add. Information: Used To evaluate HIV status

Reference value: CD4 cells 34-59%, CD4/CD8 ratio 0.9-3.1, results highly variable during progression of disease NOTE: Lymphocyte subset includes CBC results

CPT Code: 86360, CD4/CD8 profile; 85025, CBC

MALARIA SMEAR

Synonyms: Giemsa Stain; Blood Parasite

Test Section: Bacteriology/ Parasitology 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test # 404

Special Instructions: Prepare 2-3 thick and thin smears immediately after collection

Specimen & Volume: EDTA anticoagulated whole Blood

Container: Slides and EDTA Tube of blood for referral if necessary

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions Section IV](#)

Rejection Criteria, specific: Clotted blood, smears made from EDTA blood > 1 hr old; Blood smears > 3 days old. For Universal rejections, see Section I.

Methodology: Microscopic examination of Giemsa stained smear

Add. Information: Used to detect blood parasites such as: malaria, microfilaria

CPT Code: 87207

MCADD (Medium chain Acyl Co-A Dehydrogenase Deficiency) - See Newborn Screening

MEASLES SEROLOGY See Rubeola and Rubella Serology

MHA-TP - See TP-PA

MICROSPORIDIUM STAIN

Synonyms: Chromotrope 2R Stain for microsporidium, Enterocytozoan Stain

Test Section: Bacteriology/Parasitology, 803-896-0805

Days Test Performed: Monday - Friday, as requested

Request Form: DHEC 1335, Test # 410

Special Instructions: Do not concentrate specimen

Specimen & Volume: 1 ml fresh stool less than 1 hour old preserved in 10% formalin; duodenal aspirates in 10% formalin; urine sediment, sputum, corneal scrapings, nasal smears (please submit at least 2 thin smears)

Container: Screw-capped leak proof container/tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: PVA preserved stool, plastic or paraffin-embedded tissue. For Universal rejections, see Section I.

Methodology: Chromotrope 2R Stain/light microscopy

Add. Information: Diagnosis of Microsporidian infection by detection of spores

CPT Code: 87207

MITES - See "Scabies"

MUMPS VIRUS CULTURE

Synonyms: also see respiratory viral culture

Test Section: Virology, 803-896-0819

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test # 270

Special Instructions: NA

Specimen & Volume: Urine preferred, Throat swab, CSF [See throat swab collection, Section III, if needed.](#)

Container: No transport media needed for urine or CSF. Use sterile leakproof container. Screw capped tube of viral transport media (available upon request) for throat swab.

Storage/Shipping Temperature: Store in refrigerator; Ship with cold packs. If shipping is delayed more than 48 hours, freeze at -70 C and ship on dry ice

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Use of calcium alginate swab for throat specimen; specimen not cold on arrival. For Universal rejections, see Section I.

Methodology: Cell Culture

Add. Information: NA

CPT Code: Culture, 87252; Identification 87253

MUMPS VIRUS SEROLOGY

Synonyms: NA

Test Section: Virology, 803-896-0819

Days Test Performed: Once/week

Request Form: DHEC 1332, Test #135 Mumps IgG (single specimen)

Special Instructions: NA

Specimen & Volume: 2 ml. whole clotted blood or 1 ml. serum [See Venipuncture procedure, Section III, if needed](#)

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: EIA

Add. Information: Immune status reported as positive, negative or equivocal

CPT Code: 86735

MURINE TYPHUS SEROLOGY - See "Rickettsial Serology"

MYCOBACTERIAL CULTURE, BLOOD

Synonyms: TB, AFB

Test Section: Mycobacteriology (TB), 803-896-0828

Days Test Performed: Monday-Friday

Request Form: DHEC 1335, Test #601

Special Instructions: Use Bactec 13A Vial (1) Clean septum of 13A vial with 70% alcohol; (2) Use good aseptic technique to cleanse arm; (3) Aseptically draw 4 to 5 ml blood and inject into 13A vial (4) Clean top of vial with 70% alcohol, cover top with tape and mail in mailer provided

Specimen & Volume: 4-5 ml whole Blood [See Venipuncture procedure, Section III, if needed](#)

Container: Bactec 13A Vial (Call Lab for container, 896-0828)

Storage/Shipping Temperature: Store and ship at room temperature; Incubate at 37 ° C if shipping is delayed over 24 hours

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen >5 day old. For Universal rejections, see Section I.

Methodology: Bactec 460 system , HPLC, Gen-Probe

Add. Information: NA

CPT Code: 87116(Culture). For ID, 87149(Gen-Probe) and 87143-(HPLC)

MYCOBACTERIAL CULTURE, Other than Blood

Synonyms: AFB, TB

Test Section: Mycobacteriology (TB), 803-896-0828

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #601

Special Instructions: NA

Specimen & Volume: 5-10 ml Sputum, and other body fluids; 10 ml urine or gastric washings, Walnut sized portion of feces or 10 ml liquid stool [See mycobacterium culture collection procedure, Section III](#)

Container: Screw capped 50 ml polypropylene conical tube

Storage/Shipping Temperature: Store and ship Sputum at room temperature.

If shipping is delayed more than 24 hours, store in refrigerator. Store Urine in refrigerator and ship cold with cold packs.

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen > 5 days old when received (Sputum and Urine). For Universal rejections, see Section I.

Methodology: Conventional culture methods, Gen-probe and HPLC for ID

Add. Information: NA

CPT Code: 87015 for conc; 87116 for culture; For ID, use 87149 -Gen-Probe & 87143-HPLC

MYCOBACTERIAL CULTURE, REFERRED FOR IDENTIFICATION

Synonyms: AFB, TB

Test Section: Mycobacteriology (TB), 803-896-0828

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test # 602

Special Instructions:

Specimen & Volume: Send only pure culture with sufficient growth to perform test

Container: LJ slant preferred

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Infectious substance [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Contaminated culture, non-viable organism. For Universal rejections, see Section I.

Methodology: HPLC, Gen-Probe

Add. Information: NA

CPT Code: 87149 GenProbe and 87143- HPLC

MYCOBACTERIA ANTIBIOTIC SUSCEPTIBILITY

Synonyms: Sensitivity Testing

Test Section: Mycobacteriology (TB), 803-896-0828

Days Test Performed: Weekly on new TB isolates and by request on previously positive patients

Request Form: DHEC 1335, Test # 604

Special Instructions: Call Laboratory for drugs other than INH, Ethambutol, Rifampin, Streptomycin and Pyrazinamide

Specimen & Volume: NA

Container: NA.

Storage/Shipping Temperature: NA.

Shipping Description: NA

Rejection Criteria, specific: None. For universal rejections, see Section I.

Methodology: Bac-Tec, conventional

Add. Information: NA

CPT Code: 87190 for Bac-Tec, 87184 for conventional disk method

MYCOPLASMA HOMINIS/UREAPLASMA CULTURE (GENITAL)

Synonyms: *M. hominis* and *Ureaplasma*

Test Section: Virology, 803-896-0819

Days Test Performed: Monday-Friday

Request Form: DHEC 1335, Test #272

Special Instructions: Please call Virology prior to sending, as special transport medium is required [See mycoplasma/ureaplasma culture collection procedure, Section III](#)

Specimen & Volume: Vaginal swab, cervical swab, urethral swab, urine, endometrial washings, and placenta

Container: Screw capped tube of mycoplasma hominis and ureaplasma transport media

Storage/Shipping Temperature: If *M. hominis* is suspected, Store in refrigerator and ship with cold packs, if specimen will reach the laboratory within 6 hours; If shipping is delayed, freeze at -70° and ship on dry ice; If *Ureaplasma* is suspected, store in refrigerator and ship with cold packs; Specimen must arrive at laboratory within 48 hours of collection

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Cotton swab with wooden shaft used for collection; Incorrect collection media used; specimen not received within stated time; specimen not cold on arrival. For Universal rejections, see Section I.

Methodology: Culture

Add. Information: NA

CPT Code: Culture, 87109; Identification, 87253

***MYCOPLASMA PNEUMONIAE* CULTURE (RESPIRATORY)**

Synonyms: *Mycoplasma pneumoniae*

Test Section: Virology, 803-896-0819

Days Test Performed: Monday-Friday

Request Form: DHEC 1335, Test #272

Special Instructions: DO NOT use calcium alginate swab for collection Place swab in viral transport media after collection.

Specimen & Volume: Throat swab or Bronchial washing. [See viral respiratory culture collection procedure, Section III](#)

Container: Screw capped tube of viral transport media

Storage/Shipping Temperature: Store in refrigerator; Ship with cold packs; Specimen must arrive at laboratory within 48 hours of collection

Shipping Description: Diagnostic Specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen more than 48 hrs old when received; Calcium alginate swab used. For universal rejections, see Section I.

Methodology: Culture

Add. Information: NA

CPT Code: Culture, 87109; Identification, 87253

NAEGLERIA CULTURE - See "Amoebae Culture"

NEWBORN SCREENING PANEL

Synonyms: NA; Tests include: Amino Acid profile (including PKU), Galactosemia (GAO & GALT), T4 and TSH for Congenital Hypothyroidism (CH), Congenital Adrenal Hyperplasia (CAH), Hemoglobinopathies (Sickle variants, etc.), Acylcarnitine (including MCADD), Biotinidase Deficiency and Immuno Reactive Trypsin (IRT) for Cystic fibrosis.

Test Section: Newborn Screening, 803-896-0874

Days Test Performed: Monday - Friday

Request Form: DHEC # 1327

Special Instructions: See [capillary blood collection by heel stick, Section III](#)

Specimen & Volume: Whole bloodspots on filter paper; Fill all circles with blood

Container: Special Filter paper attached to request form and preaddressed mailing envelope

Storage/Shipping Temperature: Allow blood to dry 4hrs or overnight before packing; Store and ship at room temperature; Ship within 24 hours of collection; Do not mail in plastic biohazard bags

Shipping Description: Diagnostic Specimen See [packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Scratched and abraded, contaminated, layered, or super-saturated spots. For Universal rejections, see Section I.

Methodology: T4 Thyroid, TSH Thyroid, 17-OHP(CAH), IRT(Cystic Fibrosis), GALT and TGAL(GAL)-- Fluorimmunoassay (FIA); Hemoglobinopathies -- Isoelectric Focusing (IEF), and High Pressure Liquid Chromatography(HPLC) ; Amino Acid Profile, and Acylcarnitines--Tandem Mass spectrophotometry; and Biotinidase—UV Analysis

Add. Information: Interpretation: All results will be reported to the hospital, clinic, or institution and the attending physician (2 separate copies); All tests except Hemoglobinopathies are reported as normal or Abnormal. If abnormal, the value is also given on the report or in a follow up letter. Hemoglobins are reported as normal or with the appropriate hemoglobinopathy identified.

1. Amino Acid Profile:

If any amino acid level is outside normal limits, a quantitative result is given.

Abnormal screen values are as follows:

PKU- Phenylalanine (PHE) level of ≥ 3 mg/dL or 180 μ M.

Homocystinuria Methionine (MET) level of ≥ 100 μ

Maple Syrup Urine Disease (MSUD) Valine (VAL) level of ≥ 275 μ M

And leucine(Leu) and isoleucine (ILE) level of ≥ 375 μ M.

Citrullinemia CIT level of ≥ 76 μ M.

Argininosuccinic Aciduria- CIT ≥ 76 μ M

For PKU. If the infant is diagnosed as having phenylketonuria, the infant should be provided a low phenylalanine diet. Repeat blood examinations can be performed as necessary to assist the physician in maintaining the phenylalanine level within prescribed limits

2. Congenital Hypothyroid (CH) Screen:

All infants receive a T4 (Thyroxine) and a TSH (Thyroid Stimulating Hormone) screening test.. A T4 value of ≤ 7 μ g/dL is abnormal for infants ≤ 7 days old.

A T4 value of ≤ 4 μ g/dL is abnormal for infants ≥ 8 days old.

A TSH value of ≥ 22 μ IU/mL is abnormal for all infants, regardless of age.

NEWBORN SCREENING PANEL, Cont.

3. **Congenital Adrenal Hyperplasia (CAH) Screen:**

17-OH-progesterone value of ≥ 40 ng/ml or for infants with a birth weight of ≥ 2500 grams are reported as Abnormal

17-OH-progesterone value of ≥ 65 ng/ml for infants with a birth weight of < 2500 grams are reported as Abnormal.

4. **Galactosemia (GAO) Screen:**

All infants receive a total Galactose and galactose-1-phosphate uridyl transferase (GALT) enzyme screen tests. A Galactose value ≥ 10 mg/dL is considered Abnormal. GALT is reported as Normal or Deficient (abnormal). A GALT level ≤ 60 μ M is considered deficient.

5. **Hemoglobinopathy (Hb) Screen:**

Results are reported as normal hemoglobin (Hb FA or Hb AF) or as an interpretative diagnosis for abnormal Hemoglobins. (e.g. Hb FAS, FAC FS) **Please note that this test does not detect all Thalassemias or Hemoglobins.**

HbA2 and S Quantitation (when whole blood is received): Results are reported as a percentage hemoglobin. HbA2 percentage $\geq 3.5\%$ is reported as abnormal.

6. **Acylcarnitines Profile**

This profile identifies numerous inborn errors of fatty acid oxidation.

Results are reported as Normal or Abnormal. If all or any acylcarnitines are outside (greater than the cutoff) normal limit, a quantitative result will be given along with the abnormal cutoff level.

Medium Chain Acyl co-A Dehydrogenase Deficiency (MCADD)

The C8 carnitine, and the C8/C10 ratio, must be elevated for the test to be reported as a positive screening for MCADD. Elevated levels of one or more, but not all, of the measured carnitines will be reported as “ may be indicative of a fatty acid oxidation disorder”

Abnormal Acylcarnitine cutoff levels

Primary Markers

C8 (Octanoyl carnitine) ≥ 0.60 μ M

C8/C10 ratio ≥ 3.0

Secondary Markers

C6 (Hexanoyl carnitine) ≥ 0.52 μ M

C10 (Decanoyl carnitine) ≥ 0.38 μ M

C10:1 (Decenoyl carnitine) ≥ 0.25 μ M

Note: Acylcarnitine levels drop precipitously over the first few weeks of life in both normal and affected infants, with affected infants values remaining in the abnormal range. A decrease in measured Acylcarnitine levels in an infant with MCADD over a period of time should not be interpreted as condition improvement. The infant has MCADD

Short chain Acyl co-A Dehydrogenase Deficiency (SCADD)

Abnormal Acylcarnitine cutoff levels

C4 (butyryl carnitine) ≥ 1.86 μ M

Long Chain 3-H Acyl co-A Dehydrogenase Deficiency (LCHADD)or

Trifunctional Protein Deficiency (TFP)

Abnormal Acylcarnitine cutoff levels

Primary Marker

C16-OH (3OH palmitoyl carnitine) ≥ 1.15 μ M

NEWBORN SCREENING PANEL, Cont.

Trifunctional Protein Deficiency (TFP),(cont)

Secondary Markers

C14:1 (Tetradecenoyl carnitine)	≥ 0.64 μM
C16 (Palmitoyl carnitine)	≥ 8.91 μM
C18:1 (oleyl carnitine)	≥ 3.54 μM
C18:1-OH (3-OH Oleyl carnitine)	≥ 0.11 μM

Very Long Chain Acyl co-A Dehydrogenase Deficiency (VLCADD)

Abnormal Acycarnitine cutoff levels

Primary Markers

C14:1 (Tetradecenoyl Carnitine)	≥ 0.64 μM
C14:1/C12:1 ratio	≥ 3

Secondary Markers

C14 (Tetradecanoyl carnitine)	≥ 0.84 μM
C16 (Palmitoyl carnitine)	≥ 8.91 μM
C18:1 (Oleyl carnitine)	≥ 3.54 μM

Glutaric Aciduria Type II (GAII)

Abnormal Acycarnitine cutoff levels

Primary Markers

C4 (Butyryl carnitine)	≥ 1.86 μM
C5 (Isovaleryl carnitine)	≥ 1.00 μM

Secondary Markers

C6 (Hexanoyl carnitine)	≥ 0.52 uM
C8 (Octanoyl carnitine)	≥ 0.60 uM
C10 (Decanoyl carnitine)	≥ 0.38 uM
C16 ((Palmitoyl carnitine	≥ 8.91 uM
C18:1 (oleyl carnitine)	≥ 3.54 μM

Carnitine Palmitoyl Transferase II Deficiency (CPT II)

Abnormal Acycarnitine cutoff levels

C16 ((Palmitoyl carnitine	≥ 8.91 uM
C18:1 (oleyl carnitine)	≥ 3.54 μM

Carnitine/Acylcarnitine Translocase Deficiency (CACT)

Abnormal Acycarnitine cutoff levels

C16 (palmitoyl carnitine	≥ 8.91 uM
C18:1 (oleyl carnitine)	≥ 3.54 μM

7. Biotinidase Deficiency

A Biotinidase level of ≤ 10 ERU(Enzyme Response Units) is considered deficient

8. Cystic Fibrosis (CF)

Abnormal result levels

An IRT (immunoreactive trypsinogen) level of ≥ 105 ng/mL in initial specimen

An IRT level of ≥ 70 ng/mL in subsequent specimens

CPT CODES:; Amino Acid Profile-83139, T4-84437; TSH-84443; CAH-83498,

Galactosemia-82760, 82775; Hemoglobinopathies 83020, Acylcarnitines 82017, IRT for Cystic Fibrosis 83516

NOROVIRUS DETECTION BY PCR

Synonyms: Norwalk or Norovirus PCR

Test Section: Molecular Epidemiology 803-896-0825

Days Test Performed: Weekly

Request Form: DHEC 1335, Test #114

Special Instructions: Batch stool specimens if possible. Rectal swabs are of insignificant value because they contain too little nucleic acid for amplification

Specimen & Volume: 1 ml fresh diarrheal stool specimen. Specimens collected within 48-72 hours of onset of symptoms are best; Specimens collected within 7 days of onset of symptoms will be accepted

Container: Sterile screw capped 50 ml. polypropylene conical tube or Enteric Kit.

Storage/Shipping Temperature: Store in refrigerator; Ship with cold packs

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen not cold on arrival; Specimen more than 7 days old when received. For Universal rejections, see Section I.

Methodology: Reverse transcriptase polymerase chain reaction (RT-PCR)

Add. Information Used to detect the presence of Norwalk-like virus (RNA).

RT-PCR results are positive or negative for the presence of Norwalk-like viruses (NLV)

CPT Code: 83890 extraction; 83894 Gel electrophoresis; 83898 amplification; 83902 Reverse transcriptase

OVA AND PARASITES EXAMINATION(O & P)-See "Parasite Examination, General"

PAP SMEAR /BREAST SMEAR CYTOLOGY

Available only to DHEC county health department clinics

Synonyms: Paps smear, Breast smear

Test Section: Cytology, 803-896-0892

Days Test Performed: Monday-Friday

Request form: DHEC 1362, Test # 65000

Special Instructions: NA

Specimen & Volume: Fixed Cervical or vaginal smear, or breast smear [See collection procedures, Section III](#)

Container: Microscope slide

Storage/Shipping Temperature: Slides may be stored indefinitely when spray-fixed; Store and ship at room temperature Use slide mailer.

Shipping Description: Fixed slides are considered non-hazardous and do not require special precautions for transport [See packing and mailing instructions, Section IV](#)

Rejection Criteria, specific: Air drying of slide. For Universal rejections, see Section I.

Methodology: Microscopic observation of stained smears

Use/Add. Information: Interpretation: Findings are reported using the Bethesda System; Screening for presence of atypical, pre-neoplastic and neoplastic cells; Screening for presence of certain types of genital infections; evaluation of hormonal function (vaginal smears only)

CPT Code: Screen 88164; physician's interpretation 88141

PARAINFLUENZA VIRUS CULTURE- See respiratory viral culture

PARASITE EXAMINATION, GENERAL (O & P)

Synonyms: Ova and parasites, (O & P)

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #401

Special Instructions: NA

Specimen & Volume: "Walnut" sized Stool, or 2 Tbsp liquid stool preserved in 10% formalin, SAF (sodium-acetate-acetic acid formalin), MIF (merthiolate-iodine-formalin) or PVA Note: Submit liquid or soft specimens in PVA for detection of trophozoites [See collection procedure, Section III](#)

Container: Leak proof screw cap tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen contaminated with urine or water, laxatives or barium; specimens covered in fungal growth; specimens that appear hard and desiccated; specimens more than 4 days old. For Universal rejections, see Section I.

Methodology: Microscopic exam of concentrate. FA for Giardia/ Cryptosporidia

Add. Information: Detection of protozoan cysts, helminth eggs and larvae

CPT Code: 87177, Microscopic exam; 87206, FA

PARASITE EXAMINATION, STAINS,-See Cryptosporidium and Trichrome stains

PARASITE EXAMINATION, BLOOD PARASITES - See "Malaria Smear"

PARASITE EXAMINATION, ID OF PROGLOTTID OR WORM

Synonyms: NA

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #405

Special Instructions: Submit in 10% formalin or alcohol if formalin not available

Specimen & Volume: Proglottid or worm

Container: Leak-proof screw cap tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: NA. For Universal rejections, see Section I.

Methodology: Visual or microscopic Examination of specimen

Add. Information: NA

CPT Code: 87168

PARASITE EXAMINATION, PINWORM - See "Pinworm Exam"

PARASITE SEROLOGY

Synonyms: NA; Test include: Chagas disease, cysticercosis, echinococcosis, leishmaniasis, malaria, schistosomiasis, trichinosis, visceral larva migrans (Toxocara) Toxoplasmosis; For additional information call 803-896-0805

Test Section: Referred to Centers for Disease Control and Prevention (CDC) for testing

Days Test Performed: NA

Request Form: CDC Specimen Referral Form 50.34 Rev. 8-84

Special Instructions: NA

Specimen & Volume: 2 ml Whole clotted blood or serum

Container: Red top vacuum tube [See Venipuncture procedure, Section III if needed](#)

Storage/Shipping Temperature: NA

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None For Universal rejections, see Section I.

Methodology: NA

Add. Information: NA

CPT Code: NA

PARVOVIRUS IgG/IgM SEROLOGY

Synonyms: NA

Test Section: Virology, 803-896-0819

Days Test Performed: Weekly

Request Form: DHEC 1332, Test [#257](#)

Special Instructions: Single specimen only

Specimen & Volume: 5 ml whole blood or 2 ml serum [See Venipuncture procedure, Section III](#)

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: IFA

Add. Information: Interpretation: Positive or negative for Parvovirus

CPT Code: 86747 each immunoglobulin

PINWORM EXAMINATION

Synonyms: *Enterobius vermicularis*, Cellophane tape prep, Scotch tape prep

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test [#403](#)

Special Instructions: Use clear cellophane tape, collect first thing in the morning

Specimen & Volume: *E. vermicularis* ova from the perianal area [See pinworm prep collection procedure, Section III](#)

Container: Microscope slide with collection tape

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

PINWORM EXAMINATION, CONT

Rejection Criteria: Use of frosted cellophane tape, stool specimen. For Universal rejections, see Section I.

Methodology: Microscopic examination for detection of pinworm eggs and adult worms

Add. Information: NA

CPT Code: 87172

PKU - See "Newborn Screening"

POLIOMYELITIS - See Enterovirus culture

PREMARITAL PROFILE FOR OUT OF STATE LICENSES

NOTE: No premarital testing is required for South Carolina marriage license

Synonyms: NA

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday-Friday

Request Form: DHEC 1332 Rubella IgG(Test #005), Syphilis & HIV (Test #235) Under "Reason for Test/Visit", check Premarital and indicate state where marriage will take place

Special Instructions: Tests vary according to specific state ([See table 4, Section I for listing](#))

Specimen & Volume: 2 ml Whole blood or serum [See venipuncture procedure, Section III](#)

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: NA. For Universal rejections, see Section I.

Methodology: EIA- Rubella and HIV; RPR- Syphilis

Add. Information:

CPT Code: Syphilis - 86592; Rubella – 86762; HIV-86701

PRENATAL PANEL

Available only to DHEC clinics

Synonyms: Initial screen includes Syphilis, Rubella, Hep B surface antigen, ABO, Rh and AB screen, HIV; CBC included only if requested

Test Section: Diagnostic Serology 803-896-0811 and Clinical labs sections 803-896-0954

Days Test Performed: Monday - Friday

Request Form: DHEC 1332, Test #030

Special Instructions: For AB screen- separate serum from clot if transport time > 48 hours; if repeat testing is required, mark individual test

Specimen & Volume: 2 x 7 ml whole blood **AND** 7 ml EDTA anticoagulated whole blood

Container: 2 red-top and 1 lavender top vacuum tubes; Do **not** use serum separator

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Serum separator tube used for EDTA collection. For Universal rejections, see Section I.

PRENATAL PANEL, CONT

Methodology: EIA- HBsAg ,HIV-1, and Rubella.; RPR-Syphilis; Hemagglutination-ABO; and Rh; Antiglobulin test- AB Screen; Automated cell counter if CBC requested

Add. Information: Reference values are printed on results report.

CPT Code: 80055 for panel of tests

PSEUDOMEMBRANOUS COLITIS- See *C. difficile*

PVA PRESERVED FECAL SPECIMEN - See "Trichrome Stain"

RABIES EXAMINATION

NOTE: The Bureau of Laboratories is the only laboratory in S.C. which performs tests for rabies in animals. CDC performs all testing on human subjects. There is a special holiday and weekend on-call system for consultation and emergency testing that can be accessed by calling the main laboratory number, 896-0800.

Synonyms: NA

Test Section: - Virology, 803-896-0819

Days Test Performed: Monday- Saturday; Sunday and holidays if human exposure involved

Request Form: DHEC 1308, Test #26000

Special Instructions: Contact the local county health department for information on specimen collection and shipping instructions; **Confirmation is a postmortem procedure;** Because standard procedure currently requires the examination of brain tissue, the suspect animal must either be sacrificed or have died before the examination can be performed; All county health departments maintain containers appropriate for shipping specimens for examination, information on the management of animals suspected of being rabid, and to obtain vaccine for persons exposed to a rabid animal after consultation with the state epidemiologist

Specimen & Volume: Brain tissue

Container: ship whole animal head

Storage/Shipping Temperature: Keep cold; See special instructions above

Shipping Description: Diagnostic specimen; See special instructions above

Rejection Criteria, specific: No brain tissue or tissue decomposed or grossly contaminated. For Universal rejections, see Section I.

Methodology: Fluorescent Antibody (FA)

Add. Information: Reported as positive or negative. All positive reports are called directly to the county health department, or after regular working hours, to the county environmentalist who submitted the specimen

CPT Code: NA

RESPIRATORY VIRUS CULTURE

Synonyms: Battery of tests includes culture for Influenza A & B, Parainfluenza I, II, II, Adenovirus and Respiratory Syncytial (RSV) from a single specimen.

Test Section: Virology, 803-896-0819

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #270

Special Instructions: NA

RESPIRATORY VIRUS CULTURE, CONT

Specimen & Volume: Throat swab [See respiratory virus culture collection procedure, Section III](#)

Container: Screw capped tube of viral transport media (Available upon request)

Storage/Shipping Temperature: Store in refrigerator; Ship cold with cold packs within 24-48 hours. If shipping is delayed more than 48 hours, freeze at -70°C and ship on dry ice

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen not cold on arrival; calcium alginate swab used for collection. For Universal rejections, see Section I.

Methodology: Culture

Add. Information: NA

CPT Code: Culture, 87252; Identification, 87253

RH FACTOR- See Prenatal Testing

RICKETTSIAL SEROLOGY (RMSF, MT)

Synonyms: Rocky Mt. Spotted Fever / Murine Typhus serology

Test Section: Virology, 803-896-0819

Days Test Performed: Monday, Wednesday, and Friday

Request Form: DHEC 1332, Test # 021 (RMSF) and #028 (MT)

Special Instructions: Acute & convalescent sera needed, convalescent should be taken three weeks after onset of disease

Specimen & Volume: 5 ml whole blood or 1 ml serum [See Venipuncture procedure, Section III, if needed](#)

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: NA. For Universal rejections, see Section I.

Methodology: Indirect Fluorescent Antibody (IFA)

Add. Information: Interpretation: Single titers of 1:64 are considered borderline; Titers may be low or negative (1:64 or lower) if specimen was collected earlier than 10 days after onset; A 4-fold rise between paired sera is diagnostically significant

CPT Code: 86757 each titer

RPR - See "Syphilis Serology (STS)"

RUBELLA SEROLOGY- IgG and IgM

Synonyms: German measles antibody, rubella immune screen, rubella IgG., and IgM

Test Section: IgG-Chemistry 803-896-0891; IgM- Virology, 803-896-0819

Days Test Performed: Monday - Friday

Request Form: DHEC 1332 - Test # 006 for IgM, Test #005 for IgG

Special Instruction: Call prior to sending specimen for IgM-Virology, 896-0819
Rubella IgG does not require calling

Specimen & Volume: 2 ml whole clotted blood, or 1 ml serum or plasma

Container: Red top vacuum tube. [See Venipuncture procedure, Section III, if needed](#)

RUBELLA SEROLOGY- IgG and IgM, CONT

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: EIA

Add. Information: NA

CPT Code: 86762 (each immunoglobulin)

RUBEOLA VIRUS SEROLOGY-IMMUNE STATUS

Synonyms: Measles IgG

Test Section: Virology, 803-896-0819

Days Test Performed: Once/Week

Request Form: DHEC 1332, Test [#132](#)

Special Instructions: NA

Specimen & Volume: 5 ml whole clotted blood or 2 ml serum

Container: Red top vacuum tube [See Venipuncture procedure , Section III, if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature.

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: EIA

Add. Information: Used to determine immune status of patient

CPT Code: 86765

RUBEOLA SEROLOGY –DIAGNOSTIC

Synonyms: Measles IgM

Test Section: Virology, 803-896-0819

Days Test Performed: Upon request

Request Form: DHEC 1332, Test [#111](#)

Special Instructions: Call Virology (896-0819) prior to sending specimen

Specimen & Volume : 5 ml whole clotted blood or 2 ml serum

Container: Red top vacuum tube [See Venipuncture procedure, section III, if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: EIA

Add. Information: Used in Diagnosis of measles and used during possible outbreaks; IgM antibodies usually appear 3-5 days after onset of rash

CPT Code: 86765

SARS-(SEVERE ACUTE RESPIRATORY SYNDROME)

Note: By special arrangement only. Contact DHEC District Epidemiology coordinator for information on meeting case definition criteria before collecting or submitting specimen.

Synonyms: SARS-CoV, SARS Coronavirus

Test Section: Molecular Epidemiology section, 803-896-0825

Days Test Performed: As required

Request Form: DHEC 1335 Test #123

Special Instructions: Use Dacron swab only. DO NOT use Calcium Alginate swab or swab with wooden shaft.

Specimen & Volume: One Nasal or oropharyngeal swab, tracheal aspirate

Container: Submit swab dry in 50 ml. conical tube or in tube of viral or Influenza transport media

Storage/Shipping Temperature: Store in refrigerator. Ship cold with cold packs.

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Calcium Alginate swab used; swab with wooden shaft used; specimen not cold on arrival. For Universal rejections, see Section I.

Methodology: Real time Reverse Transcriptase PCR (RT-PCR)

Add. Information: Same swab can be used for Influenza isolation if swab shipped in Influenza or Viral transport media.

CPT Code: Isolation 83890; Amplification 83898; Reverse Transcriptase 83902.

SARS-ASSOCIATED CORONAVIRUS IgG EIA

Synonyms: SARS

Test Section: Virology, 803-896-0819

Days Test Performed: As needed

Request Form: DHEC 1332 Test #122

Special Instructions: Call prior to sending; **DO NOT REMOVE SERUM FROM CLOT**

Specimen & Volume: 5mL whole blood; acute/convalescent; (**CONVALESCENT SPECIMEN MUST BE COLLECTED AT LEAST 29 DAYS AFTER ONSET OF ILLNESS**)

Container: red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen; [See packing & shipping instruction, Section IV](#)

Rejection: None; for Universal rejections, see Section I

Methodology: EIA

Add. Information: None

CPT Code: 86790

SALMONELLA - See "Enteric Pathogens culture"

SCABIES

Synonyms: Mites, *Sarcoptes scabiei*

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test [#410](#)

Special Instructions: Place skin scrapings in 1-2 drops of mineral oil on a glass slide and cover with a cover slip

Specimen & Volume: Skin scrapings from infected area [See collection procedure for scabies, Section III](#)

Container: Cardboard slide mailer in biohazard bag.

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Too much oil used (several drops is too much). For Universal rejections, see Section I.

Methodology: Microscopic examination

Add. Information: Detection of scabies

CPT Code: 87210

SCHISTOSOME ANALYSIS

Synonyms: *Schistosoma haematobium*, urine for parasites

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Specimen & Volume: 15-20 ml Urine

Container: Clean, dry, screw-capped tube

Request Form: DHEC 1335, Test [#410](#)

Special Instructions: Collect last 15-20 ml of forced morning urine sample

Storage/Shipping Temperature: Store and ship at Room temperature,

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Stool submitted. For Universal rejections, see Section I.

Methodology: Microscopic examination

Add. Information: Used to detect the presence of *Schistosoma haematobium* in urine

CPT Code: 87177

SCHISTOSOMIASIS SEROLOGY - See "Parasite Serology"

SHIGELLA - See "Enteric Pathogens Culture"

SICKLE CELL - See "Hemoglobin Electrophoresis"

SPOROTRICHOSIS SEROLOGY

Synonyms: NA

Test Section: Referred to CDC Mycoses Immunodiagnostic laboratory. 404-639-3469

Days Test Performed: Referred to CDC

Request Form: CDC form

Special Instructions: NA

Specimen & Volume: 5 ml Whole clotted blood or 2 ml serum

Container: Red top vacuum tube [See Venipuncture procedure, Section III if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: NA

Add. Information: NA

CPT Code: NA

STAPHYLOCOCCUS- See “Enteric Pathogens Culture” or Aerobe referred for ID

ST. LOUIS EQUINE ENCEPHALITIS - See "Arbovirus Serology"

STREPTOCOCCUS GROUP B - See “Beta-hemolytic Streptococcus, group B culture.”

STREPTOCOCCUS PYOGENES (GROUP A) See “Beta-Hemolytic Strep, group A”

SUSCEPTIBILITY TESTING - See “Mycobacterial Susceptibility”

SYPHILIS SEROLOGY SCREEN

Synonyms: RPR, Non-Treponemal Antibody.

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Monday - Friday

Request Form: DHEC 1332 Test #001 or Test #235,

Special Instructions: NA

Specimen & Volume: 2 ml whole clotted blood or 1 ml serum

Container: Red top vacuum tube [See Venipuncture procedure Section III, if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature; Specimen must arrive within 3 days of collection

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria: Plasma specimen; more than 24 hours old. For Universal rejections, see Section I.

Methodology: RPR

Add. Information: Quantitation performed on positives

CPT Code: 86592

T4 LYMPHOCYTES - See "Lymphocyte Subset"

TB CULTURE - See "Mycobacterial Culture"

TETRAHYDROCANNABINOL (THC) (MARIJUANA) See Cocaine & Marijuana Screen and Drugs of Abuse Screen, Urine

THERAPEUTIC DRUG SCREEN See Anticonvulsant Drug Monitoring

THYROID PANEL

NON-NEONATAL AND CONFIRMATORY NEONATAL

Synonyms: Free T₄ and TSH

Test Section: Clinical labs, Clinical Chemistry unit, 803-896-0891

Days Test Performed: Monday - Friday

Request Form: DHEC 1332, Test #915

Special Instructions: NA

Specimen & Volume: 1-2 ml serum See [Venipuncture procedure, Section III, if needed](#)

Container: Red top vacuum tube

Storage/Shipping Temperature: Store and ship at room temperature.

Shipping Description: Diagnostic specimen. See [packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: Enzyme Immunoassay Assay (EIA)

Add. Information: NA

CPT Code: TSH-84443, Free T4-84439

TORCH BATTERY

No longer available as battery.

Rubella IgG, test #005 for immune status, test #006 for diagnostic.

Toxoplasmosis Serology, CMV IgG and Herpes I and II are not offered.

TOXOCARA - See "Parasite Serology"

TOXOPLASMA SEROLOGY- See "Parasite Serology"

TP-PA SEROLOGY

Synonyms: MHA-TP

Test Section: Diagnostic Serology, 803-896-0811

Days Test Performed: Twice weekly. Usually Monday and Thursday

Request Form: DHEC 1332 Test # 002 and Test # 004

Special Instructions: NA

Specimen & Volume: 0.5 ml serum See [Venipuncture procedure, Section III, if needed](#)

Container: Red top Vacutainer

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen See [packing and shipping instructions, Section IV](#)

Rejection Criteria, specific None. For Universal rejections, see Section I.

Methodology: Particle Agglutination

Add. Information: Used to determine the stage of infection; Not a screening test

Reactive test is usually reactive for life (85% of cases)

CPT Code: 86781

TREPONEMAL ANTIBODY SEROLOGY See TP-PA

TRICHINOSIS - See "Parasite Serology"

TRICHROME STAIN

Synonyms: Giardia stain, Amoeba (stool exam), Trophozoite stain

Test Section: Bacteriology/Parasitology, 803-896-0804

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #402

Special Instructions: PVA specimen preferred; Fresh specimen less than 1 hour old accepted

Specimen & Volume: "Walnut" size formed stool or 2 tbsp liquid specimen mixed well in PVA, or LV-PVA preservative

Container: Leak-proof screw-cap tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Inadequate mixing of stool and preservative; stool preserved in 10% formalin, SAF, or MIF; fresh stool specimen more than 1 hour old. For Universal rejections, see Section I.

Methodology: Microscopic examination of stained smears

Use/Add. Information: Used to detect protozoan cysts and trophozoite stages

CPT Code: 88313

TUBERCULOSIS CULTURE - See "Mycobacterial Culture"

TULAREMIA SEROLOGY

Synonyms: NA

Test Section: Referred to CDC

Days Test Performed: NA

Request Form: CDC Form

Special Instructions: Contact Bacteriology/Parasitology, 803-896-0805

Specimen & Volume: 2 ml Whole blood or serum

Container: Red top vacuum tube [See Venipuncture procedure, Section III, if needed](#)

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: NA

Add. Information: Interpretation printed on CDC report

CPT Code: 86000

URINALYSIS:

Test available only in Columbia area when specimen can be delivered directly to the laboratory

Synonyms: NA

Test Section: Clinical Laboratories Section, Hematology Unit 803-896-0954

Days Test Performed: Monday-Friday

Request Form: DHEC 1332, Test # 774

Special Instructions: NA

Specimen& Volume: 10 ml "clean catch" Urine

Container: Plastic urine container

Storage/Shipping Temperature: Not suitable for shipping; Must be delivered to lab

Shipping Description: NA. Do Not ship

Rejection Criteria, specific: Greater than 6 hours old. For Universal rejections, see Section I.

Methodology: Includes microscopic and biochemical examinations

Add. Information: Reference values: sp. Gravity 1.005-1.030, pH 5.0-8.0, other biochemicals negative, microscopic variable but essentially free of cellular and crystalline elements

CPT Code: 81000

URINE DRUG ANALYSIS- See Drugs of Abuse Screen, urine

URINE LEAD ANALYSIS- See Lead, Urine

VARICELLA VIRUS CULTURE

Synonyms: Chickenpox

Test Section: Virology, 803-896-0819

Days Test Performed: Monday - Friday

Request Form: DHEC 1335, Test #270

Special Instructions: Write Varicella in block on form for Agent/Organism/Virus Suspected

Specimen & Volume: Vesicle fluid

Container: Screw capped tube of viral transport media (Available upon request)

Storage/Shipping Temperature: Store in refrigerator; Ship cold with cold packs; Ship within 24 hours after collection

Shipping Description: Diagnostic specimen. [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen more than 24 hours old when received; Specimen not cold on arrival. . For Universal rejections, see Section I.

Methodology: Cell culture

Add. Information: NA

CPT Code: Culture, 87252; Identification, 87253

VARICELLA VIRUS SEROLOGY

Synonyms: NA

Test Section: Virology, 803-896-0819

Days Test Performed: Once/Week

Request Form: DHEC 1332, Test #110 for Immune Status

Special Instructions: Please call Virology, 896-0819 prior to sending specimen from a pregnant patient who has been exposed to varicella

Specimen & Volume: 5 ml. whole blood or 2 ml serum; Single specimen for immune status, [See venipuncture procedure, Section III, if needed](#)

Container: Red top vacuum tube

Storage /Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: None. For Universal rejections, see Section I.

Methodology: EIA

Add. Information: Interpretation: Immune status: Positive, negative or equivocal

CPT Code: 86787

VDRL

Test only performed on CSF.

Synonyms: NA

Test Section: Virology, 803-896-0819

Days Test Performed: Once a week

Request Form: DHEC 1332, Test #003

Special Instructions: None

Specimen & Volume: 0.5ml -1.0 ml CSF only

VDRL cont.

Container: CSF collection tube

Storage/Shipping Temperature: Store and ship at room temperature

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Blood submitted. For Universal rejections, see Section I.

Methodology: Slide flocculation

Add. Information: Interpretation: Reactive or non-reactive

CPT Code: 86592

VIBRIO - See Enteric Pathogens Culture

VIRAL CULTURE- See individual viral groups i.e. enterovirus or respiratory virus culture, or individual virus, i.e. Herpes, Influenza CMV, Varicella culture

VIRAL ISOLATE FOR IDENTIFICATION

Synonyms: Referred culture for ID

Test Section: Virology, 803-896-0819

Days Test Performed: Monday-Friday

Request Form: DHEC 1335, Test #275

Special Instructions: None

Specimen & Volume: Tissue Culture Isolate

Container: Screw capped culture tube

Storage/Shipping Temperature: Store in refrigerator; Ship with cold packs. If shipping is delayed more than 48 hours, freeze at -70° C and ship on dry ice. If culture tube or shell vial; fill with media and ship on cold packs. Please call prior to shipping so needed culture materials can be obtained. 803-896-0820

Shipping Description: Infectious substance [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: non-viable culture submitted. For Universal rejections, see Section I.

Methodology: Virus Neutralization, Hemagglutination inhibition

Add. Information: NA

CPT Code: 87253

VIRAL LOAD - See HIV-1 PCR Quantitative (RNA)

VISCERAL LARVA MIGRANS - See "Parasite Serology"

WEST NILE VIRUS SEROLOGY- IgG/IgM

Synonyms: NA

Test Section: Virology, 803-896-0819

Days Test Performed: As needed

Request Form: DHEC 1332, Test # 121

Special Instructions: IgG and IgM on serum specimens. IgM only on CSF.

Specimen & Volume: CSF or 2 ml serum

Container: Sterile vacuum tube or Appropriate tube for CSF collection

Storage/Shipping: Temperature: Please call prior to shipping (803- 896-0819)

Shipping Description: Diagnostic specimen [See packing and shipping instructions, Section IV](#)

Rejection Criteria, specific: Specimen taken too early For Universal rejections, see Section I.

Methodology: EIA

Add. Information: None

CPT Code: 86790

WESTERN EQUINE ENCEPHALITIS - See "Arbovirus Serology"

WHOOPING COUGH - See "*Bordetella pertussis*"

YERSINIA - See "Enteric Pathogens Culture"

